USSR/Farm Animals. Cattle Q-2

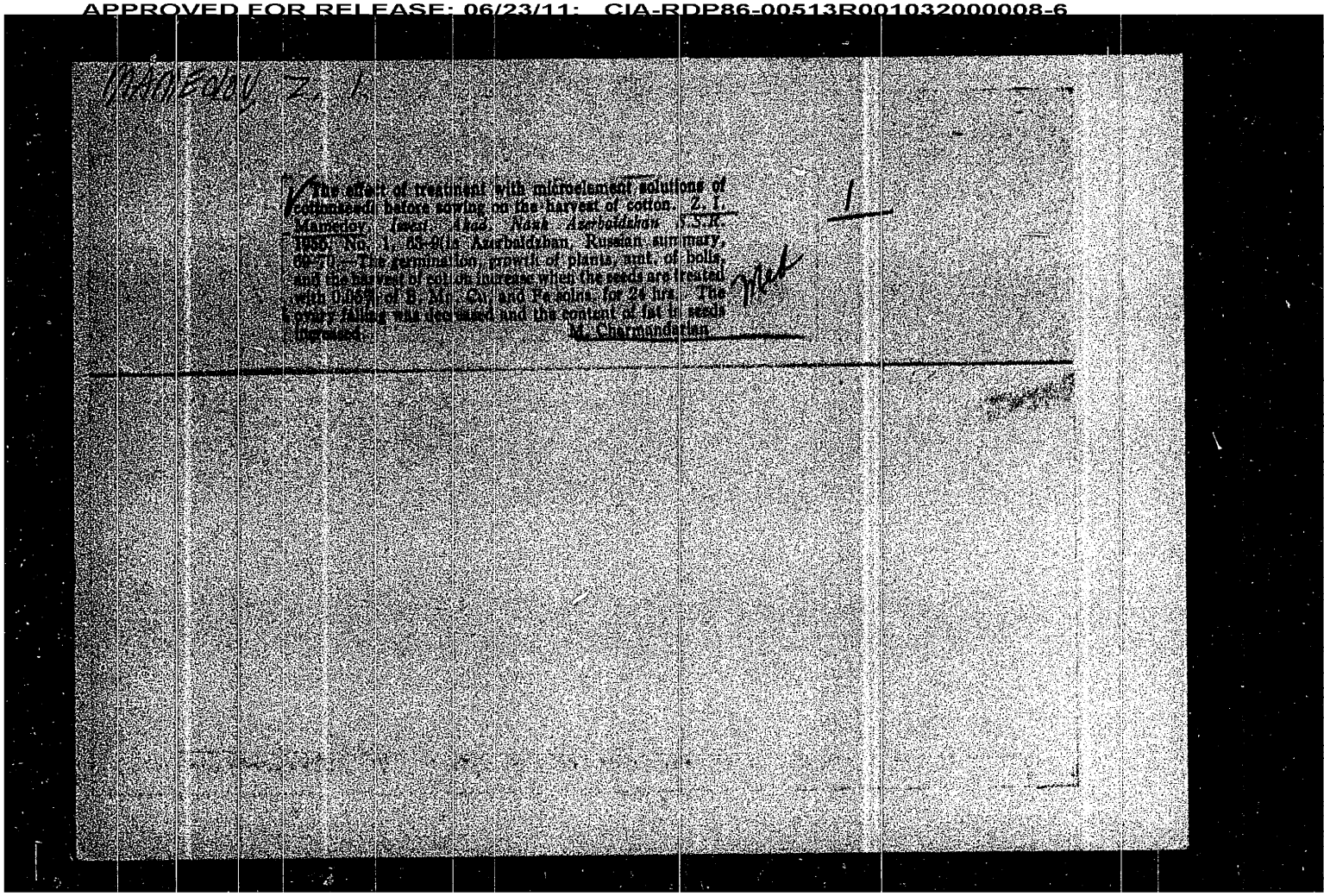
Abs Jour : Ref Zhur - Biol., No 8, 1958, No 35666

Author : Mamedov Z., Mokhtiyev Kh.
Inst : Not Given
Title : On the Fattening of Cattle and Buffaloes with Cottonseed Hulls and Cottonseed Meal (Ob otkorme krupnogo rogatogo skota i buyvolov khlopkovoy sholukhoy i zhmykhom)

Orig Pub : Azerb. sosyalist kend tosorrufety, 1957, No 4, 34-35

Abstract : The experimental data regarding the utilization of the wastes of the ginneries of Azerbaijan (cottonseed hulls and cottonseed meal) for the fattening of the local cattle and buffaloes are given. The fattening with cottonseed hulls and cottonseed meal during 50-55 days had increased the body weight of the animals by 16%, and had improved the quality of meat.

Card : 1/1



Ganzeev, Z. I.

The effect of treatment with microelement solutions of cottonseed before sowing on the harvest of cotton. Z. I. Ganzeev. Izvest. Akad. Nauk Azerbaidzhan. S.S.R. 1955, No. 1, 85-91. (Azerbaidzhan, Russian summary, 92-7).—The germination, growth of plants, nut. of bolls, and the harvest of cotton increase when the seeds are treated with 0.05% of B, Mn, Cu, and Zn solns. for 24 hrs. The oil content of the seeds was decreased and the content of fat in seeds increased.

M. Charmandarian

MAMEDOV, Z. I.

"The Effect of Manganese, Iron, and Copper on the Development and Yield of Cotton." Cand Biol Sci, Inst of Farming, Acad Sci Azerbaydzhan SSR, Baku, 1953. (RZhBiol, No 7, Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

MEKHTIYEV, S.D.; MAMEDOV, Z.F.; NARIMANBEKOV, O.A.; RYABINA, L.V.

Cyanoethylation of acetaldehyde in the presence of strongly basic ion exchanges. Azerb. khim. zhur. no.3:37-43 '65.
(MIRA 19:1)

1. Institut neftekhimicheskikh protsessov AN AzerSSR i Azerbaydzhanskiy institut nefti i khimii im. M. Azizbekova.

MAMEDOV, Yu.M., inzh.

Operation of electric substations without the presence of attendants.
Energetik 11 no.5:23 My '63. (MIRA 16:7)
(Electric substations)

DURMISH'YAN, A.G.; MAMEDOV, Yu.G.; MIRZADZHANZADE, A.Kh.; RAFIBEYLI, N.M.; SADYKH-ZADE, E.S.

Experimental investigations of the hydrodynamic and thermodynamic properties of gas-condensate mixtures during seepage in a porous medium. Dokl. AN Azerb. SSR 20 no.8:31-35 '64. (MIRA 17:12)

1. Azerbaydzhanskiy nauchno-issledovatel'skiy neftyanoy institut.

DURMISH'YAN, A.G. (Baku); MAMEDOV, Yu.G. (Baku); MIRZADZHANZADE, A.Kh. (Baku); RAFIBEYLI, N.M. (Baku); SADYKH-ZADE, E.S. (Baku)

Experimental investigations of hydrodynamic and thermodynamic properties of gas-condensate mixtures flowing in a porous medium. Izv.AN SSSR. Mekh.i mashinostr. no.1:133-136 Ja-F '64.
(MIRA 17:4)

SADYKH-ZADE, E.S.; MAMEDOV, Yu.G.; RAFIBEYLI, N.M.

Determination of the dynamic pressure of initial condensation in the presence of a porous medium. Izv.vys.ucheb. zav.; neft' i gaz 6 no. 12:33-34 '63. (MIRA 17:5)

1. Azerbaydzhanskiy institut nefti i khimii im. M.Azizbekova i Azerbaydzhanskiy nauchno-issledovatel'skiy institut po dobyche nefti.

SADYKHZADE, E.S.; MAMEDOV, Yu.G.; RAFIBEYLI, N.M.

Effect of rock gas sorption on permeability. Izv. vys. ucheb. zav.; neft' i gaz 6 no.8:45-49 '63. (MIRA 17:6)

1. Azerbaydzhanskiy institut nefti i khimii imeni M. Azizbekova i Azerbaydzhanskiy nauchno-issledovatel'skiy institut po dobyche nefti.

MAMEDOV, Yu.A.

Similarity and difference between the human and canine pancreas. Dokl. AN Azerb. SSR 21 no.7:68-71 '65.
(MIRA 18:12)

1. Azerbaydzhanskiy meditsinskiy institut. Submitted January 21, 1965.

MAMEDOV, Yu.A.; TOPCHIBASHEV, I.M., prof., nauchnyy rukovoditel' raboty

Causes of death following transverse resection of the caudal portion of the pancreas in an experiment. Azerb. med. zhur. 42 no.8:32-35 Ag '65. (MIRA 18:11)

MAMEDOV, Ye.M.

Use of ozocerite applications in fractures of tubular bones.
Zdrav. Turk. 7 no.11:14-15 N'63 (MIRA 17:3)

1. Iz Krasnovodskoy gorodskoy bol'nitsy (glavnyy vrach M.B. Mayramov).

MAMEDOV, Ya.D.

Unilateral estimations in the case of asymptotic stability of solutions to differential equations with unbounded operators. Dokl. AN SSSR 166 no.3:533-535 Ja '66.
(MIRA 19:1)

1. Voronezhskiy inzhenerno-stroitel'nyy institut. Submitted May 24, 1965.

L 39112-66 EWT(d) IJP(c)

ACC NR: AP6030375 SOURCE CODE: UR/0199/66/007/002/0313/0317

25
B

AUTHOR: Mamedov, Ya. D.

ORG: none

TITLE: One-sided evaluations in the study of the solutions of the Cauchy boundary problem for differential equations with an unbounded operator

SOURCE: Sibirskiy matematicheskiy zhurnal, v. 7, no. 2, 1966, 313-317

TOPIC TAGS: Cauchy problem, Banach space, nonlinear operator

ABSTRACT: The solutions of the Cauchy boundary problem 16

$$dx/dt = A(t)x + f(t, x)\ (0 \leqslant t < \infty),\ x(\infty) = x_\infty,$$

within the Banach space E have been investigated. Here A(t) $(0 \leq t < \infty)$ is a linear unbounded operator acting in E with a domain of definition independent of t. The nonlinear operator f(t, x) is defined over the topological product $(0, \infty) \times E$ and is subjected to one-sided evaluations. The development is based on three theorems derived in the paper; one of these deals with differential inequalities for the Cauchy boundary problem:

$$dU/dt = \varphi(t, U),\ U(\infty) = U_\infty.$$

Orig. art. has: 7 formulas. [JPRS: 36,487]

SUB CODE: 12 / SUBM DATE: 02Mar65 / ORIG REF: 004 UDC: 517.9

Card 1/1 mcp

0918 1098

where

$$(A'(t)x, x) \geqslant -\alpha_0(t)(A(t)x, x) \quad (4)$$

and $F(t,x)$ is a Gateaux differentiable functional such that

$$\partial F(t,x)/\partial t \geqslant -\alpha_0(t)F(t,x) \quad (0 < t < \infty,\ x \in \mathfrak{D}(A^{1/2})). \quad (5)$$

This yields results on boundedness and stability of solutions of (1), (2). He considers similarly

$$\ddot{x}(t) + A(t)x(t) + P[t, x(t)] = 0, \quad x(\infty) = x_\infty,\ \dot{x}(\infty) = \dot{x}_\infty, \quad (6)$$

$$\ddot{y}(t) + A(t)y(t) + P[t, y(t)] = B[t, \dot{y}(t)], \quad y(\infty) = y_\infty,\ \dot{y}(\infty) = \dot{y}_\infty. \quad (7)$$

44, 55

The author expresses his gratitude to S. G. Kreyn for much valuable advice and his attention to this work. This paper was presented by academician I. N. Vekua on 27 March 1965. Orig. art. has: 10 formulas.

44, 55

SUB CODE: MA/ SUBM DATE: 24Mar65/ ORIG REF: 003/ OTH REF: 001

L 7084-66 EWT(d) IJP(c)

ACC NR: AP5027217 SOURCE CODE: UR/0020/65/164/006/1239/1242

44,55

AUTHOR: Mamedov, Yu. D.

44,55

ORG: Voronezh Structural-Engineering Institute (Voronezhskiy inzhenerno-stroitel'nyy institut)

16,44,55

TITLE: The Cauchy limit problem for differential equations of first and second order with unbounded nonlinear potential operators 16,44,55

SOURCE: AN SSSR. Doklady, v. 164, no. 6, 1965, 1239-1242

TOPIC TAGS: Cauchy problem, differential equation

ABSTRACT: The author considers the limit problem for

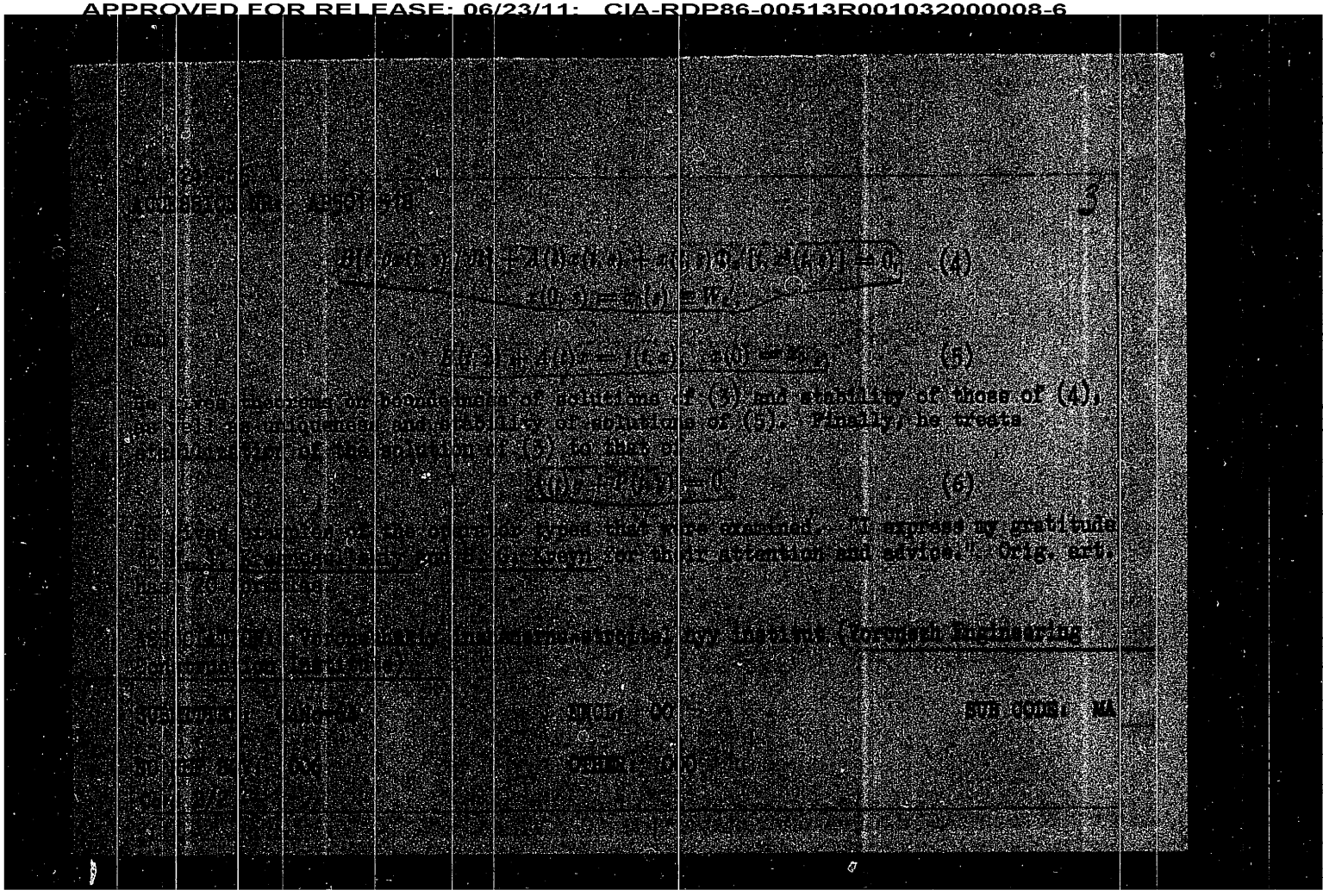
$$\dot{x}(t) = A(t)x(t) + P[t, x(t)], \quad (1)$$

$$\lim_{\tau \to \infty} x(\tau) = x(\infty) = x_\infty \quad (2)$$

in Hilbert space H where A(t) is unbounded. He obtains estimates for

$$\|A^{1/2}(t)x(t)\| + 2F[t, x(t)]; \quad (3)$$

Card 1/2 UDC: 517.919.2

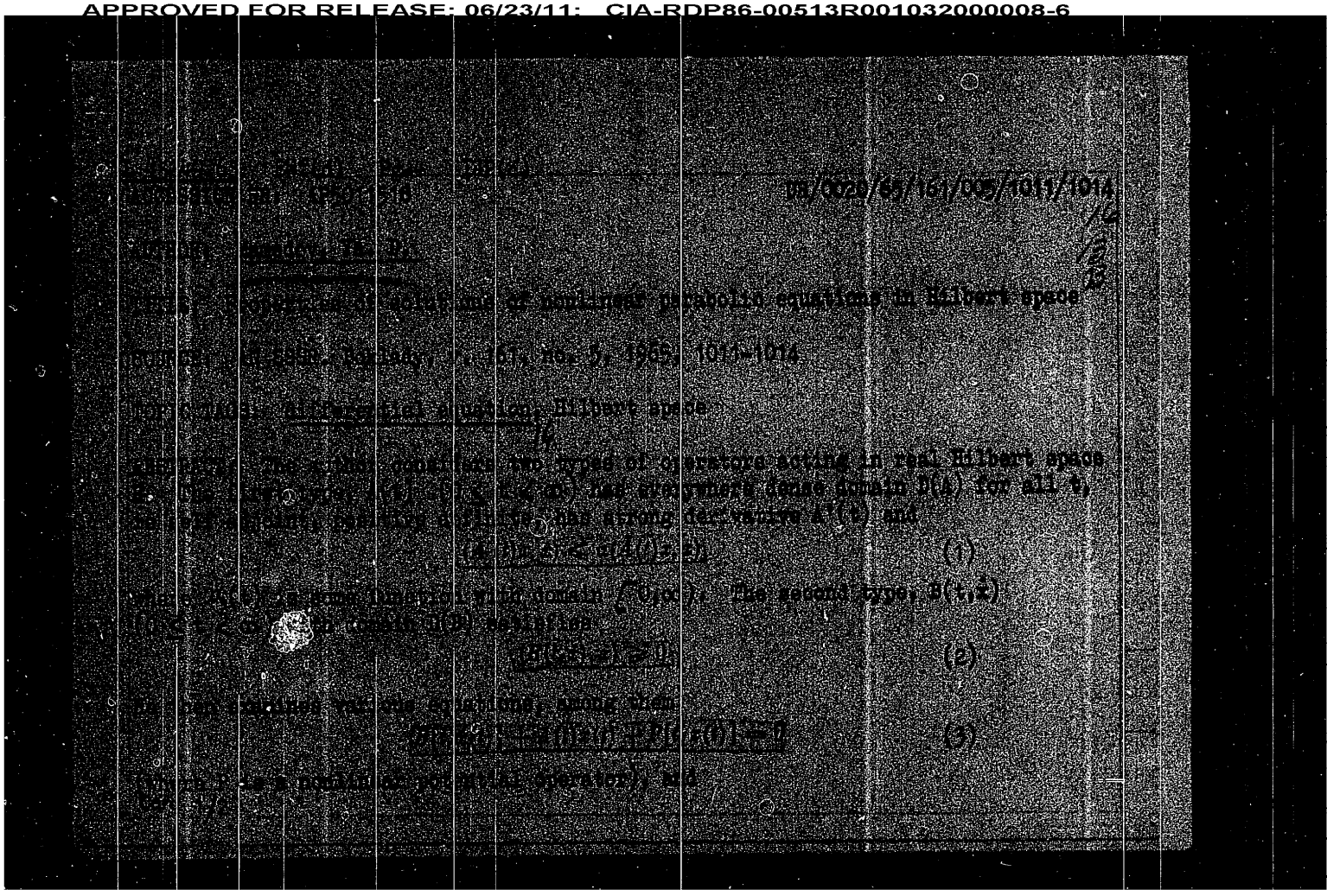


$$\frac{\partial H(x,\lambda,u)}{\partial u} + \lambda(0)\frac{\partial g(x,u)}{\partial u} + \lambda(1)\frac{\partial h(x,u)}{\partial u} = 0, \quad (4)$$

$$x(0,u) = a(u) = x_0,$$

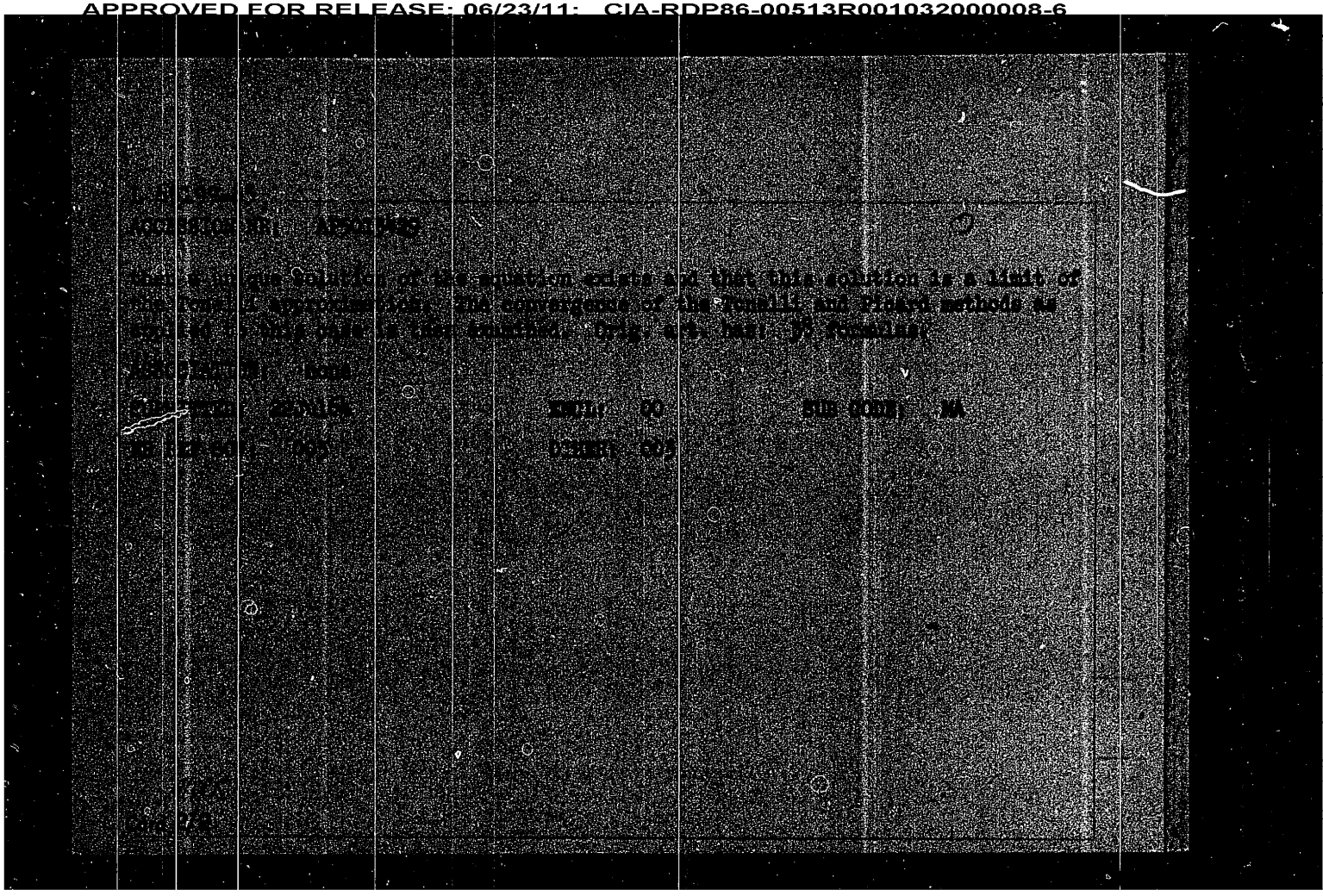
$$\lambda(0)\frac{\partial g(x,u)}{\partial x} + \lambda(1)\frac{\partial h(x,u)}{\partial x} = \dot{\lambda}(t), \quad \lambda(0) = \lambda_0 \quad (5)$$

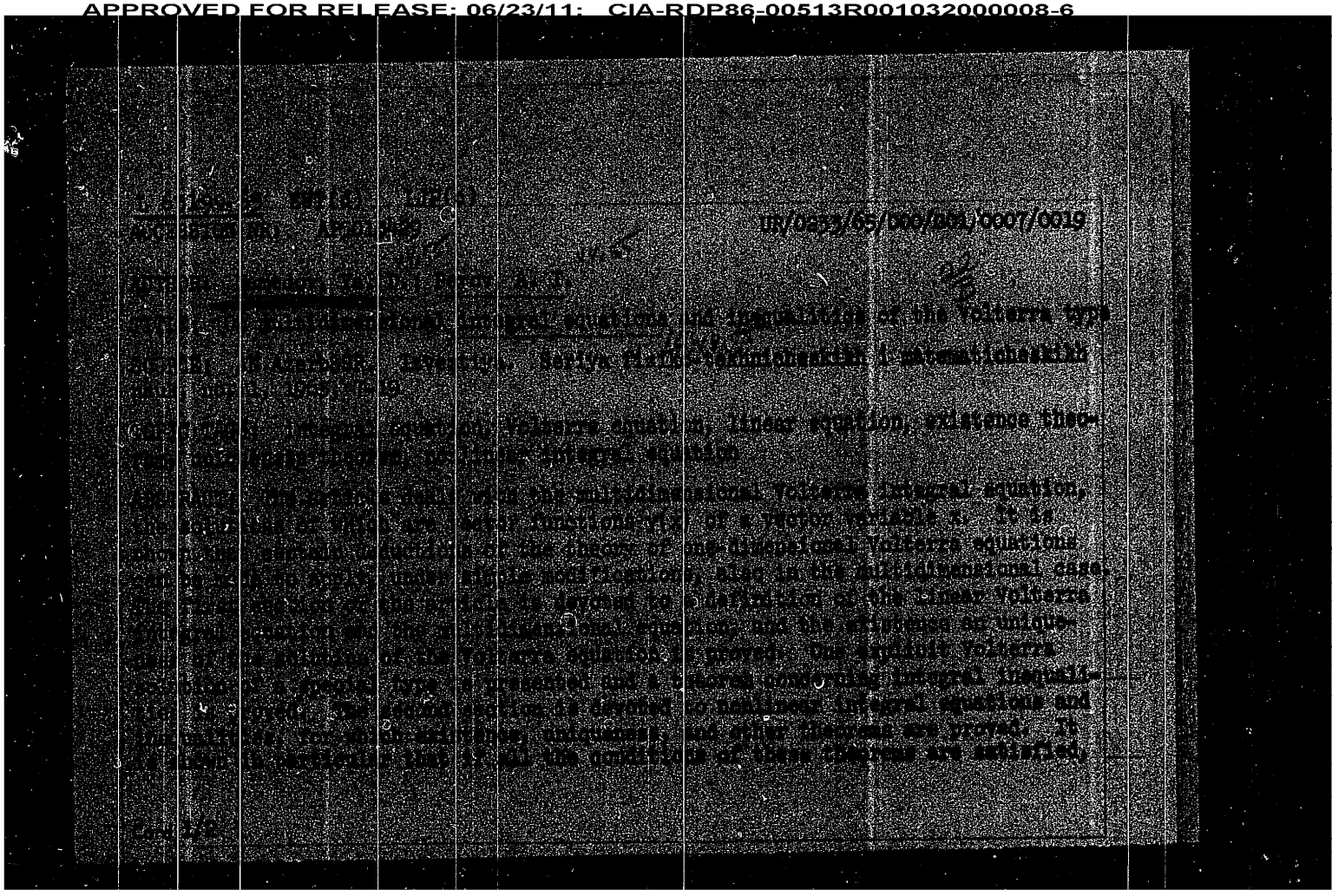
$$\lambda(0)\frac{\partial g(x,u)}{\partial u} + \lambda(1)\frac{\partial h(x,u)}{\partial u} = 0. \quad (6)$$



MAMEDOV, Ya.D.

Unilateral valuations under the conditions of existence and uniqueness of solutions to the limit Cauchy problem in Banach space. Sib. mat. zhur. 6 no.5:1190-1196 S-O '65. (MIRA 18:10)





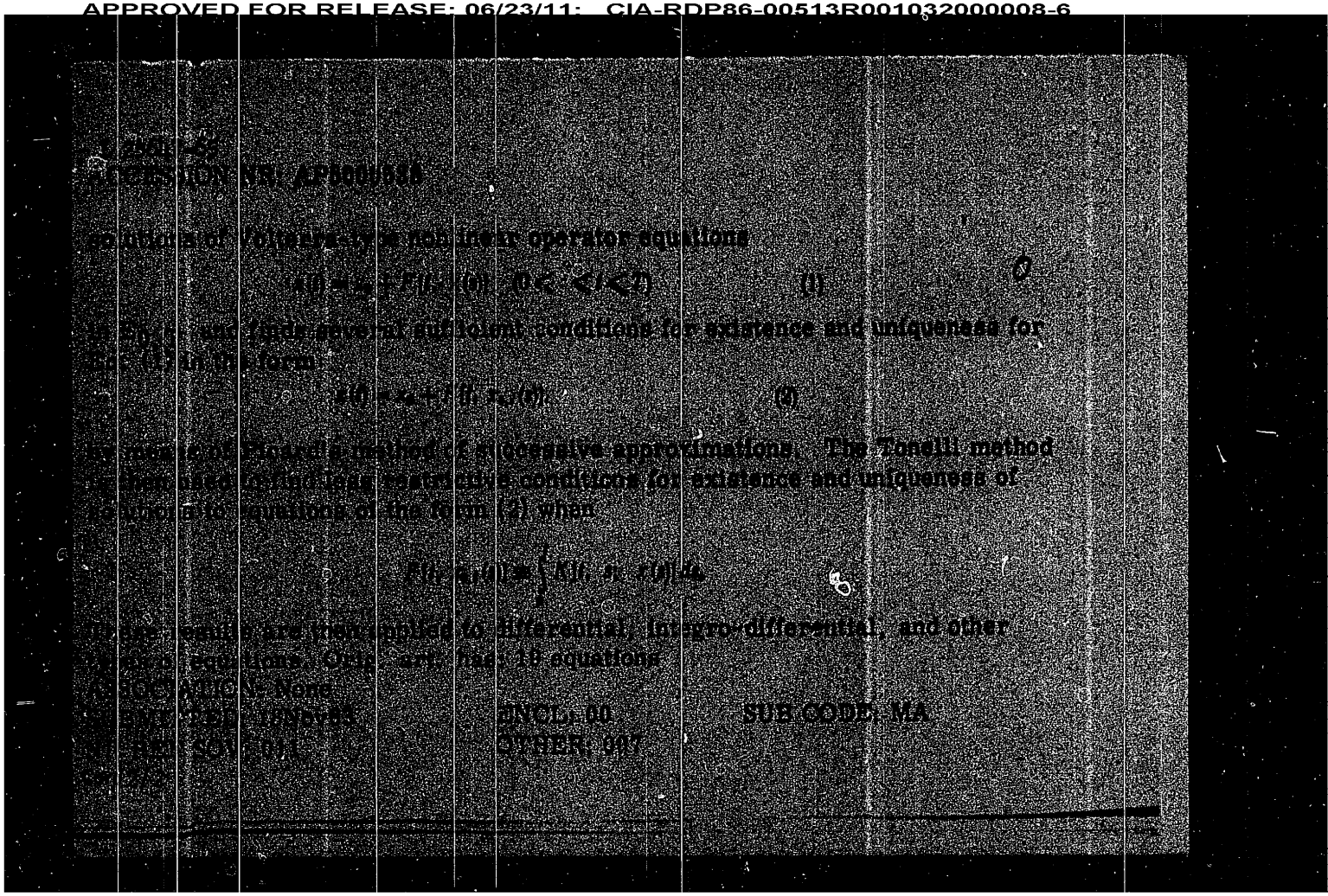
MAMEDOV, Ya.D.

Convergence of successive approximations in the theory of ordinary differential equations in Banach spaces. Pribl.metod.resh.diff.urav. no.2:99-105 '64. (MIRA 18:4)

MAMEDOV, Ya.D.

Some properties of solutions to nonlinear hyperbolic equations in Hilbert space. Dokl. AN SSSR 158 no.1:45-48 S-O '64

1. Voronezhskiy inzhenerno-stroitel'nyy institut. Predstavleno akademikom I.N.Vekua.



AUTHOR-[5]

ACCESSION NR: AP5000858

Solutions of Volterra-type nonlinear operator equations

$$x(t) = y + F(t, x(0), \ldots, x(t)), \quad 0 \le t < T \le \infty \qquad (1)$$

in Banach spaces are found. Sufficient conditions for existence and uniqueness for solutions of (1) in the form

$$x(t) = x_0 + \ldots \text{ for } t \in [0, \ldots] \qquad (2)$$

are found. The method of successive approximations. The Tonelli method is used to find local existence conditions for existence and uniqueness of solutions to equations of the form (1) when

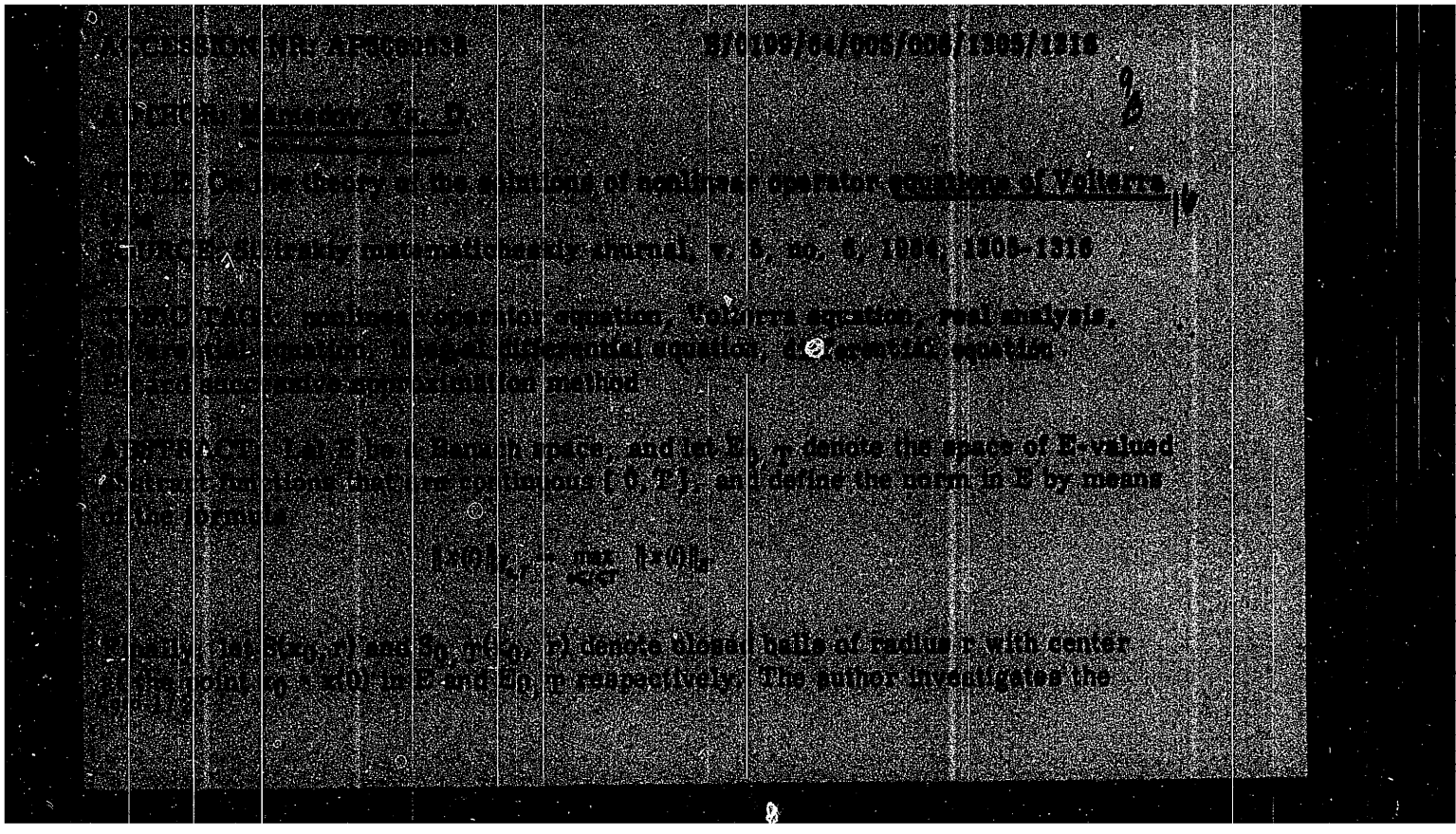
$$F(t, x_0, \ldots, x(t)) = \{K(t, s, x(t))\}$$

The results are then applied to differential, integro-differential, and other types of equations. Orig. art. has: 10 equations.

ASSOCIATION: None

SUBMITTED: 10Nov63 ENCL: 00 SUB CODE: MA

NO REF SOV: 001 OTHER: 007



A differential equation with an unbounded constant operator in a Banach space. Ueh. zap. AGU. Ser. fiz.-mat. nauk no.3:13-23 '63. (MIRA 17:12)

S/044/62/000/009/013/069
One-sided estimates for the existence conditions of... A060/A000

where A (t) is an unbounded linear operator. The convergence of the consecutive approximations for the problem (2) is investigated.

S. G. Mikhlin

[Abstracter's note: Complete translation]

Card 4/4

One-sided estimates for the existence conditions of...

where the function L is continuous, and the Cauchy problem

$$\frac{du}{dt} = L(t,u),\ u(0) = 0$$

has a unique zero solution. Then the problem (1) has a solution. It is also proven that there is at least one solution to the Cauchy problem

$$\frac{du}{dt} = f(x,t) + h(x,t),\ x\Big|_{t=o} = x_o, \qquad (2)$$

provided f satisfies the conditions enumerated above, and the operator h (x,t) is completely continuous. Some considerations are cited as to the existence of a solution to the Cauchy problem

$$\frac{dx}{dt} = A(t)x + f(t,x), x\Big|_{t=o} = x_o,$$

Card 3/4

$\Phi(x) \to 0$ it follows that $\| x \| \to 0$. Let

$$\Phi(x + h) - \Phi(x) = D(x,h) + w(x,h),$$

where the functional $D(x,h)$ is continuous in h uniformly with respect to x in any sphere, semihomogeneous and semi-additive with respect to h, and

$$\lim_{\| h \| \to 0} \frac{w(x,h)}{\| h \|} = 0.$$

With S_0 we shall denote the sphere $\| x - x_0 \| \leqslant r$. Let the operator $f(x,t)$ with values in E be uniformly continuous with respect to the set of variables $t \in [0,T]$ and $x \in S_0$, let this operator satisfy the condition

$$D(x - y, f(t,x)) - f(t,y) \leqslant L(t, \Phi(x - y)),$$

Card 2/4

S/044/62/000/009/013/069
A060/A000

AUTHORS: Kibenko, A. V., Krasnosel'skiy, M. A., Mamedov, Ya. D.

TITLE: One-sided estimates for the existence conditions of solutions to differential equations in functional spaces

PERIODICAL: Referativnyy zhurnal, Matematika, no. 9, 1962, 36 - 37, abstract 9B193 ("Uch. zap. Azerb. un-t. Ser. fiz.-matem. i khim. n.", 1961, no. 3, 13 - 19 (Azerbayjanian))

TEXT: The sufficient conditions are formulated for the existence of a solution to the Cauchy problem

$$\frac{dx}{dt} = f(x,t), \quad x\big|_{t=0} = x_0 \qquad (1).$$

in the Banach space E. Let $\Phi(x)$, $x \in E$, be a nonlinear continuous functional, where $\Phi(0) = 0$, $\Phi(x) > 0$ for $\|x\| > 0$, and from the condition that

Card 1/4

$\times d\tau (t \in [t_0, t_0 + T])$ is satisfied, where $\varphi[t, \tau, u]$ is a function satisfying certain conditions. It is proved that in $S(x_0, r)$ there exists a unique solution of (1) and that it can be determined with the aid of successive approximations according to Tonelli.

[Abstracter's note : Complete translation.]

Card 2/2

29864
S/044/61/000/007/037/055
C111/C222

16.4600

AUTHOR: Mamedov, Ya.D.

TITLE: On the solution of nonlinear integral equations in the Banach space

PERIODICAL: Referativnyy zhurnal Matematika, no. 7, 1961, 96, abstract 7 B 465. ("Dokl. AN Azerb SSR", 1960, 16, no. 4, 327 - 330)

TEXT: In the Banach space E the author considers the equation

$$x(t) = x(t_0) + \int_{t_0}^{t} K[t, s ; u(s)]ds \quad . \qquad (1)$$

It is assumed that the continuous operator $K[t,s ; x]$ ($K[t,s; \theta] = \theta$) transforms $[t_0, t_0 + T] \times [t_0, t_0 + T] \times S(x_0, r)$ ($S(x_0,r)$ - - closed sphere of the space E) into $S(x_0, r)$, and that the inequality

$$\| \int_{t_0}^{t} K[t,s;x(s)]ds - \int_{t_0}^{t} K[t,s; y(s)]ds \| \leq \int_{t_0}^{t} \varphi[t,\tau, \| x(\tau) - y(\tau)\|] \times$$

Card 1/2

35850

S/044/62/000/002/038/092
C111/C444

16,4500

AUTHORS: Guseynov, A. I., Mamedov, Ya. D.

TITLE: An investigation of the solution of non-linear equations with lagging argument

PERIODICAL: Referativnyy zhurnal, Matematika, no. 2, 1962, 71-72, abstract 2B313. ("Uch. zap. Azerb. un-t. Fiz.-matem. i khim. ser., 1960, no. 3, 3-9)

TEXT: For the solutions of non-linear operator equations with lagging in a Banach space

$$x(t) = F\left[t, x(t-\tau_1(t)), \ldots, x(t-\tau_n(t))\right] + f(t), \quad \tau_i(t) \geqslant 0$$

a number of inequalities is proved. The obtained inequalities are used in order to prove theorems on asymptotic stability and stability of the solutions of the Cauchy problem for integrodifferential equations under permanently effecting disturbances. One points to the fact that one may obtain analogous results for a countable number of differential and integrodifferential equations.

[Abstracter's note: Complete translation.]

Card 1/1

Asymptotic stability of differential ...

where $\|T(t,\tau)\| \leq e^{\gamma(t-\tau)}$. Under these suppositions one obtains estimations for the norm of the solution by the way which is usual in the theory of ordinary differential equations.

[Abstracter's note : Complete translation.]

Card 2/2

34592
S/044/62/000/001/044/061
C111/C444

16.3410 16.4600

AUTHOR: Mamedov, Ya.D.

TITLE: Asymptotic stability of differential equations in a Banach space with an unbounded operator

PERIODICAL: Referativnyy zhurnal. Matematika, no. 1, 1962, 85, abstract 1 B 391. (Uch zap. Azerb. un-t. Ser. fiz.-matem. i khim. n., 1960, no. 1, 3-7)

TEXT: Considered is the operator equation

$$\frac{dx}{dt} = A(t)x + f(t,x) \qquad (1)$$

where $A(t)$ is a family of linear operators and $\|f(x,t)\| \leq \delta \|x\|$. The author supposes that those conditions are satisfied under which the Cauchy problem for (1) is equivalent to the solution of the integral equation

$$x(t) = T(t - t_0)x(t_0) + \int_{t_0}^{t} T(t - \tau)f(\tau, x(\tau))d\tau$$

Card 1/2

88873

S/044/60/000/007/029/058
On an application of integral... C111/C222

or a unique solution in a certain sphere of the space $\widetilde{E}$.

[Abstracter's note: The above text is a full translation of the original Soviet abstract.]

Card 2/2

88873

S/044/60/000/007/029/058
C111/C222

16.4500

AUTHOR: Mamedov, Ya.D.

TITLE: On an application of integral inequalities

PERIODICAL: Referativnyy zhurnal. Matematika, no.7, 1960, 127-128. Abstract no.7756. Uch zap.Azerb. un-t. Fiz.-matem.i khim. ser. 1959, no.2, 41-46

TEXT: Starting from the Banach space E the elements $x(t)$ of which are integrable according to Bochner on $[t_0, t_0+T]$ and the $\|x(t)\|^p$ of which is summable on $[t_0, t_0+T,]$ the author introduces a new space $\widetilde{E}$ in which $\|\widetilde{x}\| = \left(\int_{t_0}^{t_0+T} \|x(t)\|^p dt\right)^{1/p}$. In $\widetilde{E}$ the author investigates the equation

$$x(t) = F(t, x(t)) \qquad (1)$$

where F is an operator of $\widetilde{E}$ into $\widetilde{E}$. With the aid of integral inequalities and other means the author states several properties of the operator F as well as sufficient conditions that the equation (1) has a solution

Card 1/2

69764

S/155/59/000/02/005/036

16,4500 16,4600

AUTHORS: Krasnosel'skiy, M.A., Mamedov, Ya.D.

TITLE: Remark on the Application of Differential and Integral Inequalities in the Question of the Correctness of the Cauchy Problem for Ordinary Differential Equations in Banach Spaces

PERIODICAL: Nauchnyye doklady vysshey shkoly. Fiziko-matematicheskiye nauki, 1959, No. 2, pp. 32-37

TEXT: The authors show that, with the aid of well known theorems on differential and integral inequalities (especially the lemma of Chaplygin), one can estimate in a very simple way the variations effected on the solution of the integro-differential equations, if the right sides or the initial conditions are subject to small perturbations.
Ye.A. Barbashin, M.I. Vishik, L.A. Lyusternik, M.G. Kreyn, A.I. Perov, and P.Ye. Sobolevskiy are mentioned.
There are 12 references: 10 Soviet, 1 American and 1 German.

ASSOCIATION: Voronezhskiy gosudarstvennyy universitet (Voronezh State University)

SUBMITTED: February 20, 1959

Card 1/1

GUSEYNOV, A.I.; MAMEDOV, Ya.D.

Positive solutions of nonlinear equations. Uch.zap. AGU. Fiz.-mat. i khim.ser. no. 2:3-14 '59. (MIRA 13:12)
(Equations)

On the Problem of the Axial Bending of a Rod of Variable Rigidity 20-118-1-8/58

bending of the rod and its second derivative are continuously differentiable functions of the load. 5 Soviet and 1 foreign references are quoted.

ASSOCIATION: Azerbaydzhanskiy gosudarstvennyy universitet imeni S.M. Kirova (Azerbaydzhan State University imeni S.M. Kirov)

PRESENTED: June 26,1957, by P.S. Aleksandrov, Academician

SUBMITTED: June 25, 1957

AVAILABLE: Library of Congress

Card 2/2

AUTHOR: MAMEDOV, Ya.D. 20-118-1-8/58

TITLE: On the Problem of the Axial Bending of a Rod of Variable Rigidity (K zadache o prodol'nom izgibe sterzhnya peremennoy zhestkosti)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol 118, Nr 1, pp 33-34 (USSR)

ABSTRACT: By means of functional analysis Krasnosel'skiy [Ref.2,3] showed that the considered problem leads to the determination of the nonvanishing solutions of the non-linear integral equation

$$(1)\quad \varphi(s) = P\varsigma(s) \int_0^1 k(s,t)\varphi(t)dt \cdot \left\{1 - \left[\int_0^1 \frac{\partial k(s,t)}{\partial s}\varphi(t)dt\right]^2\right\}^{1/2}$$

with

$$k(s,t) = \begin{cases} s(1-t) & \text{for } s \leq t \\ t(1-s) & \text{for } t \leq s \end{cases}.$$

The author applies a method elaborated by Uryson [Ref.4] and shows that by successive approximation one can determine the positive solutions of (1) for suitable choice of the initial approximation. Furthermore in this way different properties of the obtained solutions can be found, e.g. the fact that the

Card 1/2

Mamedov, Ya.D.

MAMEDOV, Ya.D.

Positive solutions of one class of nonlinear equations in a functional space. Uch. zap. AGU no.3:15-19 '57. (MIRA 11:1)
(Operators (Mathematics))

ILLEGIBLE

ILLEGIBLE

(integral equations)

MAMEDOV, Ya.D.

Analyzing positive solutions of one class of nonlinear equations (in Azerbaijani with summary in Russian). Uch. zap. AGU no.11: 3-15 '56. (MLRA 10:4)

(Integral equations)

MAMEDOV, Ya.D.

Positive solutions of Urysohn nonlinear integral equations the kernel of which is nonlinear relative to the parameter. Dokl.AN Azerb.SSR no.5:311-317 '56. (MLRA 9:9)

1.Predstavleno akademikom AN Azerbaydzhanskoy SSR M.F.Nagiyevym.
(Integral equations)

MAMEDOV, Ya.D.

Conditions for a complete continuity of the operator. Uch.zap. AGU no.3:9-15 '56. (MLRA 10:4)
(Calculus of operations)

6) $0 \leq f(x) < M < +\infty$.
7) $\lambda > 0$.
8) for $F(x,s;0,0) = P(x,s)$, $\max P(x,s) = P$ and $P\ P(x,s) > F(x,s;u,z) > Q(x,s) > 0$, P,F and Q are considered as kernels of certain linear integral operations with respect to x and s.

Let μ, $\lambda_{u,z}$, ν be the smallest values of the mentioned kernels. Under these conditions the author announces without proof the theorem: For $\mu < \lambda < \nu$ the homogeneous equation

$$u(x) = \lambda \phi \left\{ x; \int_a^b K\left[x,s;u(s)\right] ds \right\} \tag{2}$$

admits a unique solution.
The author announces still other theorems concerning the equation (1).

MAMEDOV, Ya. D

SUBJECT USSR/MATHEMATICS/Integral equations CARD 1/2 PG - 590
AUTHOR MAMEDOV Ja.D.
TITLE On the positive solutions of non-linear integral equations of the type of Urysohn.
PERIODICAL Akad.Nauk AzerbajdŽ SSR Doklady 11, 591-594 (1955)
reviewed 2/1957

The author considers the non-linear integral equation

$$(1) \qquad u(x) = \lambda \phi \left\{ x; \int_a^b K\left[x,s;u(s)\right] ds \right\} + f(x),$$

where
1) f,k, ϕ are given functions being defined for $(x,s) \in [a,b]^2$ for every $u > 0$.
2) $K(x,s;0) = \phi(x;0) = 0$.
3) $K(x,s;u)$ and $\phi(x;z)$ admit derivatives > 0 with respect to u and z respectively, and $F\left[x,s,u,z\right] = \phi'_z\left\{x;z\right\} K'_u\left[x,s;u\right]$ is continuous with respect to u and z.
4) $F(x,s;u,z)$ increases if u and z decrease, i.e. $\left\{u_1 < u_2 \text{ and } z_1 < z_2\right\} \Rightarrow \left\{F(x,s;u_1,z_1) - F(x,s;u_2,z_2)\right\}$ admits a minimum (with respect to u and z) different of 0.
5) $\lim F(x,s;u,z) \to Q(x,s)$, with $Q \equiv 0$ where Q admits a minimum > 0.

Azerbaydzhan State Univ in S. M. Kirov

NAMEDOV, Vladimir Mikailovich; SHINYANSKIY, A.V., red.

[Electrodynamic modeling of electric drives] Elektrodinamicheskoe modelirovanie elektroprivodov. Moskva, Energiia, 1964. 87 p. (MIRA 17:9)

L 31555-66 EWT(m)/EWP(j)/T LJP(c) RM

ACC NR: AP6005111 (A) SOURCE CODE: UR/0316/65/000/005/0063/0066

AUTHOR: Mamedov, V. M.; Salimov, M. A.; Kasimov, R. M.

ORG: INKhP Azerb. SSR

TITLE: Study of the dielectric properties of polyamide polymers in relation to the action of a light flux

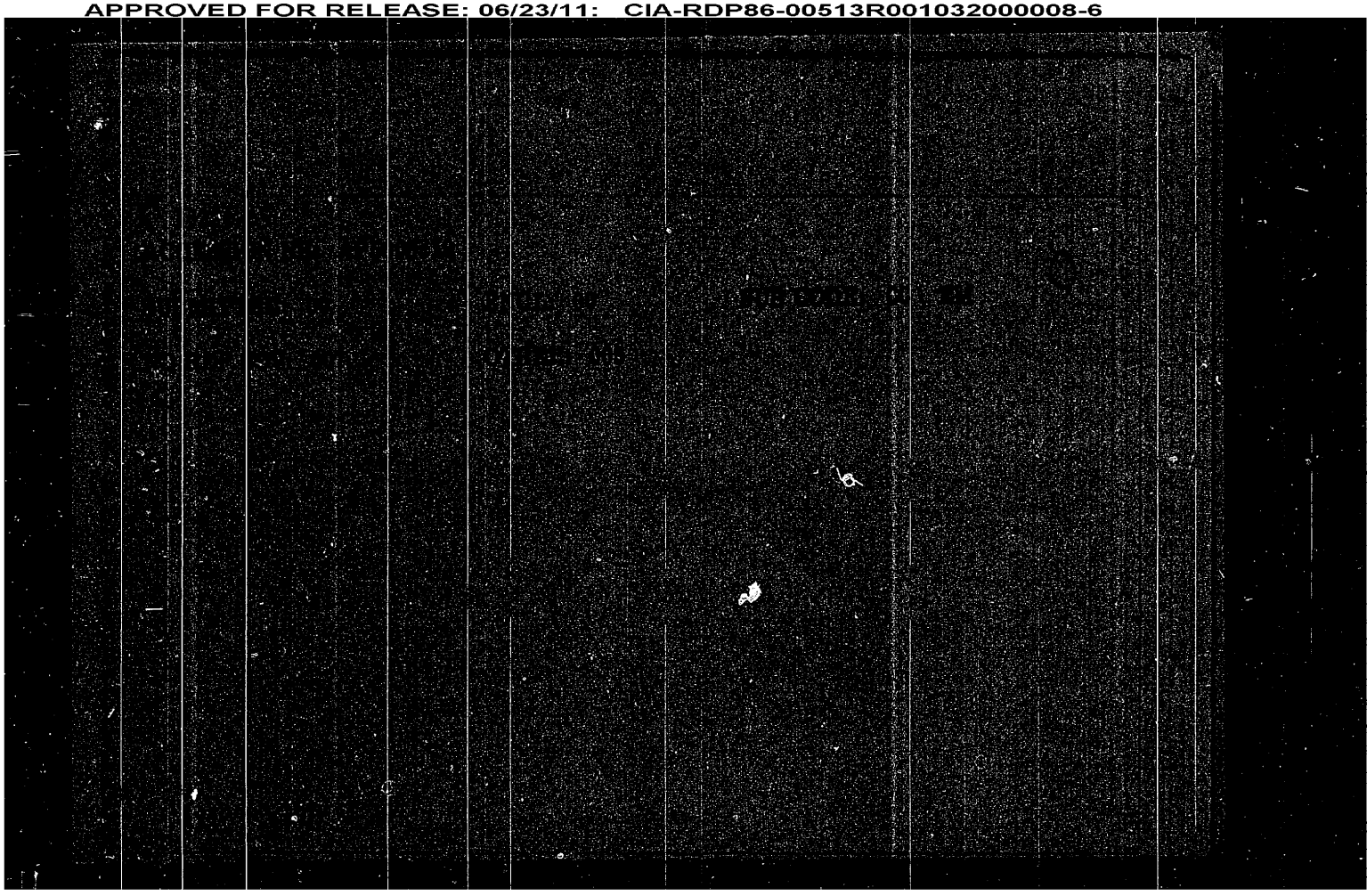
SOURCE: Azerbaydzhanskiy khimicheskiy zhurnal, no. 5, 1965, 63-66

TOPIC TAGS: dielectric constant, dielectric loss, polyamide, UV irradiation

ABSTRACT: The dielectric constant ϵ and the loss tangent tan δ of polyamide-66 were measured at room temperature in the 10^2—10^{10} cps frequency range. The dependence of ϵ and tan δ on the duration of irradiation of the sample with ultraviolet light was determined. Analysis of the frequency characteristics of ϵ and tan δ and of a diagram of dielectric loss versus ϵ for polyamide-66 shows the existence of an asymmetric character of the dispersion and the presence of a broad spectrum of relaxation times in the substance studied. Upon irradiation of polyamide-66 with ultraviolet light, the dielectric constant decreases exponentially with increasing irradiation time. The nature of the dependences of ϵ and tan δ on the irradiation dose is apparently related to the process of ionization of the amino groups, which is followed by proton transfer between these groups. On the other hand, these changes take place owing to the cross-linking of the polymer links. Orig. art. has: 3 figures and 1 formula.

SUB CODE: 07,20 / SUBM DATE: 20Jul64 / ORIG REF: 004 / OTH REF: 008

Card 1/1 JC



APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001032000008-6

ILLEGIBLE

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MAMEDOV, V.M. (Leningrad)

Forcing of transient processes in the excitation networks of d.c. machines. Izv. AN SSSR. Otd. tekh. nauk. Energ. i avtom. no.5:23-30 S-O '62. (MIRA 15:11)
(Electric machinery—Direct current)

Modelling the field circuits of ... S/196/61/000/009/042/052
E194/E155

a so-called follow-up regulator. The article describes the structural circuit of the variator which, with an additional control device, ensures that operating conditions are close to the ideal. No-load curves are given for the first and second stages of amplification taken with an amplidyne type ЭМУ-50-3000 (EMU-50-3000), intended for an inductance variator system. Experimental study of an installation with a machine inductance variator and an amplidyne type EMU-50-3000 indicates that it satisfies the requirements of modelling the field circuit of large generator-motor sets on low-power machine models.
8 illustrations.

[Abstractor's note: Complete translation.]

Card 2/2

S/196/61/000/009/042/052
E194/E155

AUTHORS: Mamedov, V.M., and Rudakov, V.V.

TITLE: Modelling the field circuits of d.c. machines in electro-dynamic models of drive systems

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.9, 1961, 8, abstract 9K 68. (Vestn. elektroprom-sti, no.3, 1961, 50-55)

TEXT: In the Institut elektromekhaniki AN SSSR (Institute of Electro-Mechanics, AS USSR) an electrical machine variator is used in modelling processes in field circuits. This ensures increase in the leakage inductance of the field circuit, which consists of a generator installation with an e.m.f. proportional to the differential coefficient of change of current in the circuit whose dynamic parameters are to be altered. The generator element of the equipment is a standard amplidyne with cross-field excitation controlled by an electronic amplifier unit, whose input is connected through a differential transformer to the circuit of the controlled parameter. To stabilise the amplidyne and reduce the time constant of its cross-circuit the variator circuit contains

Card 1/2

MAMEDOV, V. M.

Cand Tech Sci - (diss) "Study of an electrodynamic model for the analysis and synthesis of natural systems of controlling direct current electric drives." Leningrad, 1961. 22 pp;1 page of tables; (Ministry of Higher and Secondary Specialist Education RSFSR, Leningrad Electrical Engineering Inst imeni V. I. Ul'yanov (Lenin)); 250 copies; price not given; (KL, 6-61 sup, 221)

RUDAKOV, V.V., inzh.; MAMEDOV, V.M., inzh.; YEGOROV, B.A., inzh.; VLASOVA, O.D., inzh.

Electrodynamic model for studying the automatic control systems of electric drives. Vest. elektroprom. 31 no.9:55-60 S '60. (MIRA 15:5)

(Electric driving--Electromechanical analogies)
(Automatic control)

RUDAKOV, Viktor Vasil'yevich, kand.tekhn.nauk, starshiy nauchnyy sotrudnik;
MAMEDOV, Vladimir Mikhaylovich, nauchnyy sotrudnik

Reproduction of the electromechanical parameters of electric drive systems under laboratory conditions by means of universal braking devices. Izv. vys. ucheb. zav.; elektromekh. 3 no.12:124-129 '60.
(MIRA 14:5)

1. Institut elektromekhaniki Akademii nauk SSSR.
(Electric driving)

MAMEDOV, V.M.

Improved circuit for the control of a planer table with an amplidyne controller. Izv. vys. ucheb. zav.; elektromekh. 3 no.11:104-111 '60.
(MIRA 14:2)

(Planing machines) (Electric controllers)

S/144/60/000/03/017/017
E194/E455

An Electrical Dynamometer for Experimental Work

when the speed changes from zero to 1200 rpm in 0.35 seconds. The laboratory dynamometer operates sufficiently rapidly when additional resistance is connected in the armature circuit; for the case of constant torque, the time of picking up and dropping the load does not exceed 0.07 seconds. Use of the intermediate amplifier makes it possible to alter the speed of operation of the amplidyne whilst maintaining a high amplification. The apparatus also becomes adaptable to a wide range of transducers. There are 9 figures and 9 Soviet references.

ASSOCIATIONS: Institut elektromekhaniki AN SSSR (Institute of Electromechanics AS USSR)
Nauchno-issledovatel'skiy institut postoyannogo toka (DC Scientific-Research Institute)

SUBMITTED: November 17, 1959

Card 5/5

S/144/60/000/03/017/017
E194/E455

An Electrical Dynamometer for Experimental Work

is used in the armature circuit, it is necessary to apply a stronger signal, which effectively reduces the amplification factor of the amplidyne. This is undesirable and in order to increase its amplification factor an intermediate electronic amplifier is used with the further advantage that low output signals can be used. Fig 8 shows oscillograms of changes in the emf of the dynamometer machines and amplidyne during acceleration and retardation of the driving motor. The greatest distortion during acceleration is less than 5% of the steady state current, which is fully satisfactory for ordinary experimental work. In order to apply to the shaft of the driving motor a torque proportional to the square of its speed, the transducer consists of a tachogenerator excited by another tachogenerator, as shown in Fig 1. The necessary characteristics of the tacho generators are discussed. It is concluded that the recommended circuit can reproduce with high accuracy the changes in torque applied to its input. Thus, in reproducing constant torque the accuracy is more than 95%

Card 4/5

An Electrical Dynamometer for Experimental Work

dynamometer equipment with suitable voltage feed-back. It will be seen that the remanent voltage of the amplidyne is reduced to 2 to 3% of the rated voltage. Fig 5 shows an experimental external characteristic of the dynamometer machine, indicating that the accuracy of adjustment is 97 to 98% of the rated voltage. This can still cause an appreciable difference between the actual and ideal load current. Oscillograms showing the change of current in the dynamometer on reproducing constant torque without additional resistance in the armature circuit are given in Fig 6. Trace 6a corresponds to the change of speed from 0 to 1200 rpm which is the rated speed and 6b to sudden application and removal of the control signal. It will be seen that the distortion is quite appreciable under dynamic conditions. In order to reduce the inertia of the armature of the dynamometer, additional resistance is connected in the armature circuit. The resultant improvement in the static characteristics is illustrated by the curves of Fig 7. In order to produce the necessary retardation current when additional resistance

S/144/60/000/03/017/017
E194/E455

An Electrical Dynamometer for Experimental Work

Under appropriate conditions the retardation current and torque over the entire speed range depend only on the changes in the amplidyne signals. Consequently, the retardation torque is readily matched to any applied signals. Torque characteristics as shown in Fig 2 and 3 are then constructed for the dynamometer under various conditions. In practice, the characteristics of the amplidyne and of the dynamometer are not identical because of hysteresis in the magnetic circuit and, under certain circumstances, the resulting distortion may be significant. The current in the load circuit is also influenced by the delay due to magnetic inertia in the amplidyne and in the armature circuit of the dynamometer. Eq (2) is then written for the current in the armature circuit and the assessment of practical differences that occur between the ideal and actual retardation currents is demonstrated. In order to reduce the distortion, a negative feed-back of amplidyne voltage is used, as shown in Fig 1. Fig 4 shows a no-load characteristic of an amplidyne type EMU-50, used in the experimental

Card 2/5

S/144/60/000/03/017/017
E194/E455

AUTHORS: Vlasova, O.D., Junior Scientific Worker;
Yegorov, B.A., Junior Scientific Worker;
Mamedov, V.M., Junior Scientific Worker and
Rudakov, V.V., Senior Scientific Worker

TITLE: An Electrical Dynamometer for Experimental Work

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Elektromekhanika, 1960, Nr 3, pp 162-166 (USSR)

ABSTRACT: The principal requirement of a universal dynamometer for experimental work is that the power system should accurately reproduce the signals applied to it. Fig 1 shows a schematic circuit diagram of a dynamometer developed in the Electro-Mechanics Institute AS USSR. It employs the principle that the emf of the braking machine is equal and opposite to the emf of an amplidyne induced by the mmf of the feed-back winding controlled by the motor speed. On these emf's, which are in equilibrium at any speed, there is superposed a signal which causes the braking machine to operate as a generator so applying a retarding torque to the machine under test. Under steady-state conditions, the current in the armature circuit of the machine is given by Eq (1).

Card 1/5

SOV/144-59-10-8/20

Concerning Improvements in the Characteristics of Amplidynes

ASSOCIATION: Institut elektromekhaniki AN SSSR (Electro-mechanics Institute of the Ac.Sc.USSR)

SUBMITTED: June 20, 1959

Card 5/5

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001032000008-6

Concerning Improvements in the Characteristics of Amplidynes

device are shown in Figures 6 and 7. It will be seen that the linearising device almost fully compensates for the influence of hysteresis, straightens out the no-load characteristic and compensates for the active voltage drop in the armature circuit of the amplidyne. (See external characteristics in Figure 7.) Figure 8 shows oscillograms of transient characteristics of a cross-field amplidyne operating on an inductive load and Figure 9 the corresponding characteristics for a capacitative load. In each case, the upper oscillogram is without, and the lower is with, the use of the linearising device. The oscillograms show the compensation of the remanent voltage of the amplidyne and the great speed-up in transient processes. The stopping time of the motor was reduced by a factor of 10 or 12. There are 9 figures and 3 references, of which 2 are Soviet and 1 Czech.

Card 4/5

Concerning Improvements in the Characteristics of Amplidynes

proportional to the control current and output voltage of the amplidyne. If the proportionality between output voltage and control current of the amplidyne is disturbed, a correcting signal is applied. The static equations of this system are derived.

By using the intermediate amplifier unit, the negative voltage feedback can be stronger without appreciably reducing the general amplification factor of the system and thus the hysteresis loop is appreciably constricted. It is shown that by suitable adjustment of the circuit the amplification factor may also be increased. The operation of the system is briefly discussed. The time constant of this system is shown to depend only on the time constant of the control winding. Thus, it is less than in the case with differential feedback.

Tests were made using the circuit of Figure 5 with the control winding connected to an electronic amplifier. Experimental no-load and external characteristic curves of a cross-field amplidyne with and without this linearising

Concerning Improvements in the Characteristics of Amplidynes

feedback in the amplidyne. The circuit for this case is given in Figure 2 and the main equations are written. It is shown that the use of too much feedback causes an appreciable reduction in the amplification factor of the system. A special relay method of constricting the hysteresis loop and straightening out the characteristic, due to Suchánek, is then briefly described and the circuit is given in Figure 3. The method has practical disadvantages associated with inertia in the relay and with friction. Baryshnikov has proposed to constrict the hysteresis loop of an amplidyne and make the characteristic more linear by means of so-called "differential feedback", a circuit diagram of which is given in Figure 4. This case is briefly analysed and is shown to require an increased control power, which may be disadvantageous. The article then describes a circuit using an intermediate electronic amplifier unit as follow-up controller to linearise the amplidyne characteristics; a schematic circuit diagram is given in Figure 5. A signal applied to the amplidyne input is the difference between signals

AUTHOR: Mamedov, V.M., Scientific Worker SOV/144-59-10-8/20

TITLE: Concerning Improvements in the Characteristics of Amplidynes

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Elektromekhanika, 1959, Nr 10, pp 63 - 71 (USSR)

ABSTRACT: The main disadvantages of amplidynes are that they have a wide hysteresis loop, the amplification factor is not constant, and the external characteristics are not the same for different operating voltages. These defects impair the accuracy and stability of the system and may hinder the design of automatic-control systems. It is, therefore, important to improve the characteristics of amplidynes. Several methods that have been used to this end are then reviewed. One method is to demagnetise the magnetic system of the amplidynes with alternating current and, as can be seen from the curves given in Figure 1, this can reduce considerably the width of the hysteresis loop but does nothing to render the no-load curve more linear. The remanent magnetism can be appreciably reduced and the characteristics made somewhat more linear by using rigid negative-voltage

Card1/5

The Influence of Variation in the Air-gap Length on the Properties and Characteristics of Longitudinal-field Amplidynes.

length endorsed the theoretical calculations. Fig. 5 shows curves calculated from expression (8) and experimental no-load curves. They relate to an amplidyne without self-excitation winding (curve 1) and with such a winding (curve 2) for the case when the minimum gap occurs in the zone of a pole the polarity of which is opposed to that of the magnetic fluxes of the stage of amplification. There are 5 figures and 3 Soviet references.

SUBMITTED: March 27, 1959.

Card 4/4

The Influence of Variation in the Air-gap Length on the Properties and Characteristics of Longitudinal-field Amplidynes.

self-excitation of the amplidyne and to loss of control. These occurrences may be avoided by using additional resistance in the self-excitation circuit or by altering the polarity of the second stage control winding. With the latter arrangement the minimum gap occurs under the pole which has fluxes of different signs, so that the machine is demagnetised and the amplification factor is reduced. In this case one should, if possible, reduce somewhat the resistance in the self-excitation circuit and increase the amplification factor. Similar considerations show that displacement of the armature in a direction perpendicular to the axis of the poles of the first stage has no influence on the flux of this stage. The more general case of variation in the gap illustrated in Figs 3 and 4 is then considered; here the rotor is displaced in a direction that is not in line with one of the poles. A similar analysis is made for this case and expression (8) is derived for the emf at the output of the amplidyne. Experimental investigation of a two-stage longitudinal-field amplidyne of 2.5 kW with the latter type of irregularity of air-gap

The Influence of Variation in the Air-gap Length on the Properties and Characteristics of Longitudinal-field Amplidynes.

superposition can be used. On this basis and with reference to Fig 1, an analysis is made of the flux distribution as influenced by air gap asymmetry. Expressions (1) and (2) are obtained for the inductions in the air gaps and expression (3) for the mmf. The second stage of amplification, which is a four-pole system, is then examined. In this case, too, variation in the air gap under the poles causes redistribution of the magnetic induction and magnetic flux, as shown in Fig 2a. Once again the flux distribution is analysed and expressions are derived for the induction in the air gaps and the mmf. Combined operation of the two stages is then considered and expression (5) is derived for the emf at the output of the amplidyne. This expression shows that if the air gap is reduced under the pole that is of the same polarity as the magnetic fluxes of the amplification stage, it is equivalent to increasing the angle of slope of the straight line part of the no-load characteristic. It is evident that this can lead to

SOV/110-59-8-8/24.

AUTHOR: Mamedov, V.M., Engineer.

TITLE: The Influence of Variation in the Air-gap Length on the Properties and Characteristics of Longitudinal-field Amplidynes.

PERIODICAL: Vestnik elektropromyshlennosti 1959, Nr 8, pp 32-36 (USSR)

ABSTRACT: Variations in the air-gap length of longitudinal-field amplidynes may cause self-excitation of the amplidyne with loss of control or lead to a marked reduction in the amplification factor. The effect of air-gap asymmetry is particularly important if there is more than one stage of amplification, and this article is particularly concerned with a two-stage amplidyne. The two stages are considered separately and in turn. It is first supposed that the change in the air gap between the armature and stator occurs on the axis of the pole carrying the control winding of the first stage: also that the smallest gap is under the pole in which the first and second stage control fluxes are of the same polarity when they work together. As the magnetic systems are usually unsaturated, the principle of

Card 1/4

Determination of Irregularities in the Air Gaps in Multi-stage Longitudinal-field Amplidynes.

from amplidyne type EMU-50-3000. The experimental data are tabulated. The air gaps measured from the e.m.f's were compared with oscillograms of the pole fields of the amplidyne; the oscillograms are sketched in Fig.3. It will be seen from the table that the error of determination of the irregularity of the air gap and of the angle of maximum eccentricity does not exceed 15%. This method can accordingly be recommended for extensive practical use both at the manufacturers and in adjusting systems containing these amplidynes. There are 3 figures and 1 table.

SUBMITTED: June 2, 1958.

1. Amplidynes--Operation 2. Mathematics

Card 2/2

SOV/110-58-11-18/28

AUTHOR: Mamedov, V.M. (Engineer)

TITLE: Determination of Irregularities in the Air Gaps in Multi-stage Longitudinal-field Amplidynes (Opredeleniye neravnomernosti vozdushnogo zazora v mnogostupenchatykh elektromashinnykh usilitelyakh prodol'nogo polya).

PERIODICAL: Vestnik Elektropromyshlennosti, Nr.11, 1958, pp.62-63, (USSR)

ABSTRACT: Variations in the air gap can have an important influence on the properties of amplidynes. Mathematical expressions are given for rotor eccentricity and for the equivalent uniform air gap. The gap length under individual poles in a longitudinal-field amplidyne can easily be determined from the no-load e.m.f. of the second stage of the amplifier measured between neighbouring brushes located strictly on the geometrical neutral point. Expressions are given for the e.m.f. between brushes, depending on the air gap. The procedure described was used to determine the irregularity in the air gap of a longitudinal-field amplidyne of 3 kW, 3,000 r.p.m. derived

Card 1/2

MAMEDOV, V. M.

Cand Tech Sci - (diss) "Several problems in the working of weakly cemented strata under conditions of soluble gas. (From the example of the KS of the Buzovny-Mashtagin deposits)." Baku, 1961. 15 pp; (Committee of Higher and Secondary Specialist Education under the Council of Ministers Azerbaydzhan SSR, Azer. Order of Labor Red Banner Inst of Petroleum and Chemistry imeni M. Azizbekov); 250 copies; free; (KL, 6-61 sup, 221)

MAMEDOV, V.A. (Moskva)

Synthesis of a four-bar linkage with a guiding connecting rod according to a given motion law. Mashinovedenie no.5: 22-30 '65. (MIRA 18:9)

GUSEV, Yu. (Moskva); LOBACHEV Yu. (Kaluga); MOVCHIKOV, N. (Tambov); BERMES, N. (Baku); KUCHIS, Ye. (Vil'nyus); LAMEKIN, V. (Riga); NOGIN, S. (Sevastopol'); UL'YANENKO, N. (Murmanskaya obl.); ZEL'DIN, Ye. (Leningrad); CHIBIRYACHKO, V. (Severomorsk); SIMONOV, V. (Orel); ZHBANOV, Ye. (Ivanovo); VOTLOKHIN, B. (Groznyy); MAKASHEV, M. (Leningrad); MAMEDOV, V. (Balashov); GORDOV, V. (Yevpatoriya); LYAMETS, V. (Severodonetsk).

Exchange of experience. Radio no.3:1,37,44,51,53,54,55,56,58,61 Mr'64 (MIRA 17:7)

L 13289-66
ACC NR: AP6000322

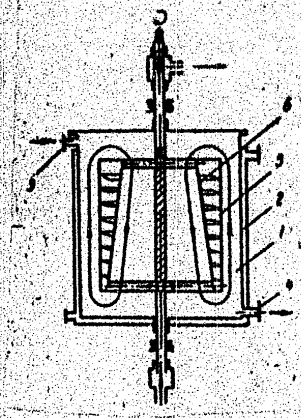

Fig. 1. 1 - housing; 2 - cooling jacket; 3 and 4 - pipes for inlet and outlet of the polymerization product; 5 - rotating cooled mixer; 6 - inside (tapered) surface of the mixer.

jw
Card 2/2

L 13239-66 EWT(m)/EWP(j)/T RM

ACC NR: AP6000322 (A) SOURCE CODE: UR/0286/65/000/021/0011/0011

INVENTOR: Lastovtsev, A. M.; Mamedov, U. A.; Kharakoz, V. V.

ORG: none

TITLE: A polymerizer. Class 12, No. 175924 [announced by the Moscow Institute of Chemical Machine Building (Moskovskiy institut khimicheskogo mashinostroyeniya)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 21, 1965, 11

TOPIC TAGS: polymerization, chemical engineering

ABSTRACT: This Author's Certificate introduces a polymerizer which consists of a housing with a cooling jacket, pipes for inlet and outlet of the polymerization product and a rotating cooled mixer mounted inside the housing. Heat exchange during the polymerization process is intensified by making the mixer in the form of a hollow cylinder whose interior surface is a truncated cone.

SUB CODE: 07/ SUBM DATE: 30Jul64/ ORIG REF: 000/ OTH REF: 000

Card 1/1 UDC: 678.053.3

MAMEDOV, U.A.; VARTANOV, A.A.

Use of vacuum filters with a diatomaceous filtering layer in the final stages of the purification of oils by the contact process. Khim.i tekh.topl. i masel 7 no.11:37-40 N '62. (MIRA 15:12)

1. Sovet narodnogo khozyaystva Azerbaydzhanskoy SSR.
(Filters and filtration) (Lubrication and lubricants)

MAMEDOV, Server Feyzulla; MAMEDALIYEV, Mamedali Rustam; KULIYEV, Mamedali Aliashiraf; MAMEDOV, Teymur Server

[Grain and corn harvesting machines; textbook for rural vocational schools] Takhyliygan ve gargydalyiygan mashynlar; kend tekhniki-peshe tehsili mektebleri uchun ders vesaiti. Baky, Azertedrisneshr, 1964. 199 p. [In Azerbaijani]
(MIRA 17:5)

ABDULZADE, A.M.; MAMEDOV, T.R.

Possibility of increasing the resistance of the ball-locking bearing of standard bit rollers. Mash. i neft. obor. no.2:14-17 '64. (MIRA 17:8)

1. Institut razrabotki neftyanykh i gazovykh mestorozhdeniy AN AzSSR.

ABDULZADE, A.M.; ISMAILOV, M.A.; MAMEDOV, T.R.; MAMEDOV, N.N.

Improving the operating conditions of the supports for bit rollers at the well bottom. Mash. i neft. obor. no.1:18-20 '64 (MIRA 17:7)

1. Zavod burovogo instrumenta g. Baku.

ABDULZADE, A.M.; MAMEDOV, T.R.

Analytic determination of the corrected diameter of bits whose cutter axes are displaced. Mash. i neft. obor. no.9: 21-24 '63. (MIRA 17:2)

1. Institut razrabotki neftyanykh i gazovykh mestorozhdeniy AN AzSSR, g. Baku.

ABDULZADE, A.M.; MAMEDOV, T.R.

Some problems in the blocking-up of boring-bit rollers. Za tekh. prog. 3 no.12:16-18 D '63. (MIRA 17:2)

DIDKHOVSKAYA, L.F.; MAMEDOV, T.M.

Effect of transformer saturation on voltage increases in long-distance power transmission lines. Trudy MEI no.64: 73-94 '65. (MIRA 19:1)

KOCHERGA Fedor Konstantinovich, kand. sel'khoz. nauk, MAMEDOV, T M., red.

[Mountain reclamation work in Central Asia and Southern Kazakhstan] Gornomeliorativnye raboty v Srednei Azii i IUzhnom Kazakhstane. Moskva, Lesnaia promyshlennost', 1965. 400 p. (MIRA 18:8)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001032000008-6

L 05636-67

ACC NR: AP6023952 (A,N) SOURCE CODE: UR/0233/65/000/006/0121/0129

AUTHOR: Mamedov, T. M.

43
B

ORG: none

TITLE: Calculation of second-harmonic overvoltages induced in electric transmission lines (calculation without account of losses)

SOURCE: AN AzerbSSR. Izv. Ser fiz-tekhn i matem n, no. 6, 1965, 121-129

TOPIC TAGS: transmission line, electric power transmission, electric transformer, harmonic analysis, analog computer

ABSTRACT: The author illustrates the use of an analog computer to solve the equation for the flux linkages in a power transformer ($\psi = \psi_0 + \psi_1 \sin\tau + \psi_2 \sin(2\tau + \theta)$), in view of the fact that the second harmonic of the transformer flux is responsible for evervoltages capable of damaging the transmission lines. It is pointed out that neglect of the dc component of the flux, as done by several authors, is not justified and leads to erroneous results. The analog computation is effected with the aid of six sets of amplifiers and multiplication blocks. The calculation is based on the method of harmonic balance. The relations obtained for the computer calculations are universal and can be used for arbitrary transformer power. The calculation data are in good agreement with data obtained with a physical model. Orig. art. has: 7 figures and 2 formulas.

SUB CODE: 09/ SUMB DATE: 00/ ORIG REF: 002

Card 1/1 egh

AKHUNDOV, F.A.; MAMEDOV, T.M.

Genesis of Iceland spar associated with the basic Santonian effusions in the Martuni synclinorium. Uch. zap. AGU. Ser. geol. geog. nauk no.1:19-23 '61. (MIRA 16:8)

MAMEDOV, T.M.

Prospects for finding vein quartz (for smelting) in the Azerbaijanian part of the Lesser Caucasus. Izv.AN Azerb.SSR. Ser.geol.-geog.nauk i nefti no.3:101-103 '62. (MIRA 15:12)
(Azerbaijan--Quartz)

MAMEDOV, T.M.

New type of ore bodies in the Belokany area. Dokl. AN Azerb. SSR 17 no. 3:223-226 '61. (MIRA 14:5)

1. Azgeolupravleniye. Predstavleno akademikom AN Azerbaydzhanskoy SSR A.D. Sultanovym.

(Belokany region--Ore deposits)

AKHUNDOV, F.A.; MAMEDOV, T.M.

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